



1879.

	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.		Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
JAN.	1	2	3	4				JULY.	1	2	3	4	5		
	5	6	7	8	9	10	11		6	7	8	9	10	11	12
	12	13	14	15	16	17	18		13	14	15	16	17	18	19
	19	20	21	22	23	24	25		20	21	22	23	24	25	26
	26	27	28	29	30	31	.		27	28	29	30	31	.	.
FEB.						1		AUG.					1	2	
	2	3	4	5	6	7	8		3	4	5	6	7	8	9
	9	10	11	12	13	14	15		10	11	12	13	14	15	16
	16	17	18	19	20	21	22		17	18	19	20	21	22	23
	23	24	25	26	27	28	.		24	25	26	27	28	29	30
MAR.						1		SEPT.							
	2	3	4	5	6	7	8		31	.	.	.	.	.	.
	9	10	11	12	13	14	15		.	1	2	3	4	5	6
	16	17	18	19	20	21	22		7	8	9	10	11	12	13
	23	24	25	26	27	28	29		14	15	16	17	18	19	20
	30	31	.	.	.	.	.		21	22	23	24	25	26	27
APRIL			1	2	3	4	5	OCT.							
	6	7	8	9	10	11	12		.	.	.	1	2	3	4
	13	14	15	16	17	18	19		5	6	7	8	9	10	11
	20	21	22	23	24	25	26		12	13	14	15	16	17	18
	27	28	29	30	.	.	.		19	20	21	22	23	24	25
MAY.				1	2	3		NOV.							1
	4	5	6	7	8	9	10		.	.	.	.	.	.	.
	11	12	13	14	15	16	17		2	3	4	5	6	7	8
	18	19	20	21	22	23	24		9	10	11	12	13	14	15
	25	26	27	28	29	30	31		16	17	18	19	20	21	22
JUNE.									23	24	25	26	27	28	29
	1	2	3	4	5	6	7		30	.	.	.	.	.	.
	8	9	10	11	12	13	14		.	1	2	3	4	5	6
	15	16	17	18	19	20	21		7	8	9	10	11	12	13
	22	23	24	25	26	27	28		14	15	16	17	18	19	20
	29	30	.	.	.	.	.		21	22	23	24	25	26	27
									28	29	30	31	.	.	.

H. A. Pilsbry.

Notes on Alves Mollusca,
"Flora"

Iowa City

→ From April 24th to August 1st.

1880



Figures refer to Cowie's Check
list.

S. = Shimuk.
P. = Plesby.

(1)

APRIL 25. (ova.)

Sayonii - 2. (252-1. Unfinished
Slanter house cliff)

(I) 5 ova, one thickly marked
one with a dot, and 3 in-
maculate. (ova $\frac{1}{2}$ advanced.

(II) In Lime Kiln, above cliff.

252(c) - 3.

Lime Kiln at Sciurus
region. Inaccessible.

252-4.-5.

Unfinished, cliff on upper
Sciurus region.

252-6-7.

Crescent stable. (1) 3 fresh ova.

S. + P. Pookone: all immaculate.

(II) Structure: Diameter outside,
18 $\frac{1}{2}$ cent. inside 6 $\frac{1}{2}$ cent. Depth
outside 8 cent. inside 6 cent.

base of weeds, mud, + moss
red
of dark grass culms (?) + some
hair; a little silk weed.

(1) *Zora immaculata*, ^{fresh} short; I took
Pitons: About 1.75 meters high;
(more clay mud, less moss.)
under shelf of rock by river.
252-8.

P. Unfinished: on cliff (low) in
Bulé region:

~~Pandion Cirrus.~~ (Dead: by cliff. Scirr.)

Oryx. (Pond regions Rapid Creek)

Dendroeca. Yellow rump. abundant

Pulmonaria ^{ill. Pilis}
Limnaea reflexa (Pond region)
Helix profunda, *hirsuta*,
hiemodora, *clausa* *multilobata*
Succinaria ovalis, *obliqua* (few)
Dendroeca palmeri (S. shot)
Scirurus carolinensis 4 young.

(3) *Hepatica acutiloba*; *Thalictrum*
anemonoides; *Viola pedata*
Ranunculus repans
Tillium nivale; *Dicentra*
cucullaria; *Sanguinaria*
canadensis; &c.

(4)

May 2nd

Buteo borealis (1)

Described: in upper Catfish
region. Diameter, outside 9 deci-
meters, inside $\frac{2}{3}$ decim. Depth, outside
4 decim, inside 1 decim.

Outside of *Quercus rubra* twigs
of $\frac{1}{2}$ in. diameter down:

Inside leaves (*Q. rubra*) (ribs of)
and a little bark: | *bed. rubra*
Contained one ovule. | about 80 ft.
high.

{ *Mimus*, *Icterus*, *Pyrrhula*,
Dendroeca &c now abundant

(6)

May 9th

Accipiters (potential) destroyed. (Broken over + torn down)

Sciurus region. (cliffs or river)

252 - 4

contained 5 ova; all but 1 imm.
- aciculate. (Fresh) took & broke 1 (s-1)

" - 5 "

contained 5 ova, one with
rather large dots (?) rest im-
maculate, (fresh) took & broke,

Harporynchus rufus () - 1

In Muddy face reg'

contained 4 ova

(6) marked one larger
I took one, & B. took one (~~one~~)
Structure in thick thorn
bush about 4 ft. high (3 ft.)
ova fresh.

252 - 9. (Lower Catfish region on
cliff at ~~cache~~) Contained
4 ova, all but one immaculate.
S took marked one, & I took a
cotyle-like one & broke it.

Picus pubescens, - 1. Just above cliff
above Crescent.

Structure in Ulmus, (dead top of)
just finished. Shimek climbed
& cut it open.

Molothrus speoris - 1. Linder boy
tells me of a Sycamore structure
containing 2 ova of above.

Ficus grosseserrata

Phaeocista tricostata Schlecht, alluvium
circum, no color, leaves (few)
multilobate (few) compound n.
Piper — — (few)

Between this & next family was
the "Pop oids" (shrub) I got about 6.
Limoniadec, *Limonea*, reflexa,
(only one), *L. fructuaria* (Parsley) the
common small *Limonea* & one
or 2 new species of *Limonea*.

Phalaris parviflora, no coloration,
leatheryolate (Ridley) & the
other species of which I had only
seen also *Physa*, *Cyclos*, *Valerian*,
Salvinia (2 species) *Placandra*,
bicanaliculata, *Hednia*, *Cyperus*, &
a few species of *Athyrium*.

Planted May 9

(Viscera bipinnata, Lactuca

occidentalis (white cap), Ambrosia
rotundifolia, (muskell),

also some Petasites, &c. (Cannabaceae)

Orchids sending up flower

stocks. (Asplenium thelypteris)

Spizella breweri - On upper
windy face region on south
slope. Structure about 1-9 in.
over ground supported partly
by grass & partly by rocks.
in a small clump of which I
was found. Diameter outside
3-3 $\frac{1}{2}$ in, inside 1 in, depth
outside 2 $\frac{1}{4}$ in, inside 1 $\frac{1}{2}$ in,
contents weight 4 gms.

+ very few blades. Inside
of this fine grass differed
pieces) + lined with horse
hair (mostly black + all long) hair
rather loose + not extending
to top of structure.

Found 3 ova. (did not take
it)

May 12th

Spiz. laevigatus 1.

which went up the hill
Slowly + took it. It con-
tained 4 ova. No dark + 2
light blue stripes well de-
veloped.

Spiz. laevigatus 2. Found by S.
about as the one above.

May 12th

Spiraea prunifolia - 2. Compacted
so no. 1.) Shrub 6 ft. tall
over 6 ft. diameter at base. In
one bush there were 6000
seedless axes & strobili.

Spiraea - 1. Shrub got
strobili & ova (now 4)

Spiraea - 16. (on quarry facing
to west, 2nd from west) 10 ft. x 10 ft.

Cyanus cristatus - 1. (On Hym-
enopterous in our yard) Contains
4 ova. Found color dark brown
look 3 ma. Will describe them
here however, ova fresh

Melochia prostrata. On Sopwith - 2)
annual in shape. I have never

May 13th

Previous migration - I went up
Hawthorn Hill (Maple about 15 ft
high contained 4 fresh ones.
I took one.

(My friend B. S. and I
were counting hawks
from Society or some
thing else, and I
climbed tree.)

J.W.B. May 29 83

May 15

Sayornis fasciatus - 11. under sed
in old house west of observatory
4 pm. All three observed

(2)

May 16

Planopachys rufus - 4. (In the
valley that goes N.E. of Rapid
creek.) Saw this on a tree-trunk
as yet dead. In the trunk.
Planopachys rufus - 5. (Up
Rapid creek itself. In
a crevice between two birch
trees, forced by the broken
off top of one which is cov-
ered by a grape vine from
the other. Structure about
8 ft high. Contained 4 or 5
markings confluent in size
at foot & end. 3 following.
Miner ear. (Rapid creek probably)

Mimus carolinensis, - 1 (In higher
rock region on west bank of
river this side of creek.)

Structure in Salix about
4 ft. high (structure just Salix)
Diameter inside, 3 in. Outside
6 in., depth, " 2 " "

4 in. Contained 2 ova. took one.

Mimus carolinensis, - 2. (about
50 yds. from above) In Salix
about 5 ft. high, 2 ova,
took one. broke it and along

**Mimus car.-3* (near Hespero-
-ulus nigris 5.) In thorn
about 6-7 ft. from ground
outside I saw a slough-
-mace, down. (took one)

Aglaias. At confluence of creek
+ river. Very potential.

Mivis (Shimék) 2 structures in
hazel patch in rapid. region
near Mivis (I).

Turdus multilimus! (Shimék)
Branches with 2 main
thorn-tree. V. yellow. No. 8.8.
Rapid region. (with cresting)
Vireo (Shimék) showed me
vireo structure in hazel
region

Sayornis fuscus - 12. (Shimék)
on Crescent cliff. Young

Polypotata. Principally Liriodendron
(familiare) deciduous tree, a few
Liriodendron, plane trees, (several species)
among them a very flat and
thin. *Ligustrum*.

Orchidaceæ. Found one *Cypripedium*
parviflorum.

May 20.

Gymnopelta loderiana - 1 (H.B. Schindl.)
Trunks (a few fl.) about 2 ft.
high in bottom (?) containing
a recently marked tree.
markings very large, from
color black.

Wet ground, fresh

May 17th '80

Glaucus anomalies (shimak) in
crossed cliff. 6 m. back.

18th

Sophrolymphatimus (shimak)
In hollow north cliff in
soft, long well concav.
concretions 3 m. apart.

From above on edge of Rapid
creek in low deranged
strata contained 7ova
I have 3. (small embryos)

Ayanga rubra. A structure
each of several
thin continuous pieces

and the other 2 are with
the molting ones.
I have one from last year
one of them & the same.

19th

Trochilus polytmus (Blumek)
at a bad cork. I saw
I heard. You cleaned.
22nd

Catherpes auratus (Stejn.)
from Boile across the river
a pair, I heard.

Turdus macrourus } (Blumek)
Sialia violacea }
The species of the last bird
is lost in a

(18) May 2 3rd

(All by myself & Lincoln)

Turdus migratorius. In Radole's
field in elm tree about
9 ft. high. measured
Diameter outside - - - 4 $\frac{1}{2}$ in.

" inside - - - 3 "

Depth " - - - 2 $\frac{1}{2}$ "

" outside - - - 5 + in.

a little more.

Mimus carolinensis (Linck)
in house, 5 over.

" " over water in birch
tree by my first Tyrannis tree

" " (1st on page 13)
contained 4 + small lookouts = 5

contained 4ova + one I took +
broken - 5

Harporynchus, In lower bed
by woodside boathouse,
4 ft. high, Gova.

Sikia, In S.-w. corner of police
of Woodside. 5 ova. Took one.

Harporynchus. N.W. end of
Scrub, which is N. 2. of
woodside, Very thick
brown bush. 4-5 ft.
high 4 ova. Took one
marked evenly.

Mines, confluence of river
& rapid creek in valley
6 ft. high 4 ova. Took one.

20
Minus. up the creek 20 yds. from
last. In low brush over creek
of sora. (long) took one.

" same place as last.
-zadura) In *Salix* 4 ft.
high. Sora.

" up the creek from
last on hazel about
5 ft. high. Sora.

Zeradura. on edge of pool
up rapid creek. on shrub
in water. Sora.

both were taken.

Minus. up Jepilo creek
in town. 3 ft. high
Sora

Pyrauga. opposite fine
along base, on horizontal
line of D. alba, con-
tained 2 pyrauga ova +
3 molothrus ova

Diameter outside - in.

" inside - "

depth " "

" outside "

24 May 2nd

style riparia, below obscuring top
in grassy, soft, deep, down-
ward broken soil.

May 30th

Poniatheca, in upper Whiskey Gulch, in
crab tree about 7 ft. high, 3 long,
dark oval marks, one from
each with a little white down.

Harpopoda, in acacia, down-
ward broken tree 4 ft. high, brown
fine markings - nearly over
a dark ground-color

Spiraea prae- ~~lata~~ *prae-* ~~lata~~ same place.

in a bunch of Hazel of which
a portion mostly has a
diameter inside $2\frac{1}{2}$ in.
depth " $1\frac{1}{2}$ " ,

Yours. R. Shunk took me to the
Geothlypis trichas? lower
down the gulch. A
pile of brush overhung
by grass (lead) Sora & *Motacilla* over. (See further
on.)

Mimus carolinus, below the above
the *M. b. b. (P)* with another.

Young.

" lower up hill creek,
in willow & poplar. Young.

24)

Pinus caroliniana. Dark brown young
crescent cliff. elevat 4000.

Saprophytes (which contain
young on May 16. page 14)

Crescent cliff. eleva. 6000
one both slightly marked

Thamnopodus, On ground between
lindens + Crescent, In clump
of *Laurus alba* sprouts one ft.
high on north hill-side

Strobiles on ground. Zone
with slightly confluent marks
6000 ft.

Fagus nigra west of Rovalys in
large solitary tree. young
one. 10 ft higher up.

Picea pubescens boggs S.E.C.
of stone pier in timber
timber over the river.
The lead box slopes the slope
in diameter about 18
ft. high. Hole about
8 in. diameter of
about 14 in. in
width 3 in. depth from
surface to bottom 7 1/2 in.
The hole has made
no racket.

Carex kobomugi. Baggy
hole about 14 in deep
in willow 12 ft high
between man & picket
fence.

26)

Protonotaria citrea on Rapid creek
bottom in hole in swamp

4 young seen.

Sings between clay bank
up rapid creek a little
up & down which
shrub has.

Spizella breweri, up Rapid.

young & one over which
shrub has

Pairs in post on north side
of Rapid creek bridge
full complement of
clerected broken over.
L
Creek got covered.

27

Chelonidea testacea, young
Just 1 + 3 lines K. L.

Succinea up rapid creek
at bottom of stream,
alive.

Chelonians. - Saw lots of
above dead + alive.

Not a Geophila.

May ~~Tue~~ ^{Wed} 1st 1926.

Mimosa pudica. Bunches tree in
my yard. 2 ova.

Crothlypis Pickas (Page 23)
shrike took ova.

2nd , Gova, shrike
took some.

28
Silene viscaria, in "Tyropea"
"hollow" street + 4 m. cotton,
Polygonum aviculare, unfinished
brickwork in Ushas.

June 1st.

T. migratorius, in cotton wood
(new)
overgrown garden of Koxabek!

June 6th '30

Mines above 1st Kehouae & below 1st
fence on mill road in birch + young
vine, tipped over 4 m.

- a Just above 1st fence on
thorn br., more as yet
- a below vine kiln. 4 young
moss.

29)

Granite on " " bending
over river. 4 ft high below
beginning of woods & above $2\frac{1}{2}$
feet from base. I have one
with streaks of red in light
marks.

In hill bottom (coral)
in solitaires & canoes.

25 ft. high on horizontal
limb. 400. took 2.

Mines, in broken in fallen
top of tree (soon) in openings
in timber below, corallville
opposite rocky slope. 300.
Canoes high above cliff (Papa
Marie & I said).

Setophaga ♂ found 30 m.
down in trees.

Otys, found on east side of a
tree etc. (see on farther)
Savannah focus in like (sup.)
1) 3 are all immaculate
but one which is thickly
marked, far advanced.

30

June 1st

Panurus fulvus f. ^{fulvus}
all in Bearwood & spruce
100 ft high over pendant trees
Young ones call about
as Male will a "chuk"
and runs like them

Zamelia can be up in
morn. High above &
in tree 14 ft high. Green
feathers.

Coccyzus americanus subsp.
East 4 miles in Hawthorne Co.
high road which bank says
"backed" travel 3 days.
A few pine trees, the willow
overboat 6 miles 20' thick
tree far advanced.

Tremendous opposite today
the hanging water you find
will well mark (N^o 10) a
" " " above
creek with side of eddy
you make like last took over
Agelaius. Any amount of
strakes, I will 4 young
young away & 3 "

3) a + 1 ovule (like R. subsp)
with 4 ovules advanced,
mark all on large side.
base 2 lobes.

Tringaleson 6th
over far advanced

June,
Collins. 4 ovules, from
Moly lange at Gravelines
June,
Eryngium alpinum over
in paleo's patches & advanced.

340 20th June.

Migration in the afternoon
with Mr. Miller & Mr. J. L.
High on horizon to Lincoln
Bank R. (fresh)

Pyrargyrae, south of Woods
Point on chain wall -
height of 6 m. of 70°. I noted
about with fine marks
2 typical Pyrargyrae - also
1 of such broken on ground
in depression the limb
horizontal 7 ft from top -
1 ft high, not directly on
limb but on long bearing
limbs of trees (most fresh)

30

East of Concord

Hillside + N.E. of

showing a difference in thickness
12 ft thick. It rests
directly on fine boulders
of green rock. It occurs very
dark.

Milins - on west side of
river opp. north end of cliff
overhanging water. Some.

" mouth of cuttish

in stream to 7 ft high.
8 over

Yonahla. (top of the page.) Situation
isolated. Stone decayed

New Littorinidae,

Littorea -

L. decidua, *L. virginea*, *L. tenuis*.

 whorls 6 very convex sub-equal, deeply impressed suture, widely appressed on columnella, striae obscure. Figure too considerably differ from all others in suture. (many)

 Physa - Distinguished by shape of columnella & by upper part of lip.

Many (?)

 Ma. Jan. 1880, from San Pedro
Extremely oblique, whorls few numerous

371



Convoluted
whorls & shapes

elongated acute column
very much twisted
only one found

Planorbis excentricus

♂ - "

(numerous)

Several other Physidae +
Veneridae.

Just tipped over.

" *Cypraptilium* (pink) on
mud banks above catfish.
Sphaerium young

38 June 2nd

General route. Started at noon
went north on road as far as Rowley's
then went westward to river
then north along cliff & got P. 1000
then went seawards & came back
in little hollow & out to road
then we crossed road & went south
along hollow that comes out at
end above mine cellar by hammering
we found (at north end) —
Spiraea prunifolia — Shrub. to
one or two clumps a few little
bushes near top. Shrub took
one or two dabs (break)
and by the 1st fence I found

29

Two divisions with 45va.
large markings in Line
46va. (far advanced)
Todus multil. (or diversicolor)
line 4 + 2 + 4. (30 ft. high +
10 ft from tree on ascendant
dike, 3 years q. { this is between
Todus multil. { lines 3 and 4
on preceding
page

1/2 way up cliff
(line 4) on horizontal bank
45va.

June 29th.

July 3rd.

Wrote letter & went up to town
in time to be back before dark just
above the house (1100) the elevation of
Mine mouth and a portion was
at 8000 feet above sea level.

July 4th.

Started early & went to town first
by road then took boat & a mule
afforded camp when I think got out
of bed at 11 in till I got to town
went in swimming at noon for it was very hot
three went up to Turkey creek on
the way & found Grindstone with
young we went up creek (?) & came
out on side there was no water
when it had to rest & I think

41

On 16th I was with Al. &

This week I found limestone
and sand in cliff lots of

yellow sand like herring
bones got here at 4.

(Maka 5 on east of Crescent Hill)



172. J.

Sink near Panga, Elba.

Noor place where we made many
perforations & helped to etc.

47



X15.

Lobularia corticaria (L.)
Very small epiphytic alga which
spreads over all the sandy soil
on parts well exposed to sun,
seen on *Cladella* fairly often.
It is not reflected on body
whorl as in *Pseudofucus*. It
only inferior whorl angles
are white, a trace fine.

48

93

Classification of Terrestrial Order Pulmonata.

Section Adelopneumona.

Suborder Geophila.

Family Succinidae

Genus *Succinea*

Family Helicellidae

Allogaster (Beck)

Ayalina (Fors)

Strobila (Hausz)

Patila (= *Anquirostra*) N.

Helicodiscus (Müll.)

Family Helicidae

Mesodon (Rafines)

Monacha (Albiss)

Trocholites (Reichenb.)

Trochulus (Linn.)

Family Tipidae

Kuba = Laniulus

Family Limacidae

Limax

Section Phaneropneumona.

Suborder Ectophthalmata.

Family Heliomidae

Helioma

Suborder Gymnophila

Family Limnidae

Limninae ?

Planorbinae

Ancylinae

Leptoxininae

My classification of Lepidota,
Order Pulmonata.

Suborder Geophila.

Section Adelopneumona

Suborder Geophila.

Family Helicidae.

Helicinæ

Helicellinæ

Gastropodæ

Pipuncinæ

Limacinae

Section Phaneropneumona

Suborder Ectopathalia.

Family Helicinædæ

Genus Helicina.



Volutigera gallo (Blmng)

Refl. 5. 2 on apical wall, the
innermost columella, smaller.
One large tubercular tooth on
columella, & a smaller one on
a lateral lip. The 2 above tall
in outer w. elegant color,
(dark, long, broad, rays)
Width 5.



Succinea oblique (Say)

Pick of the day
darker than value

Mouth coarse & irregular,
Columella & lip equally
curved, Aperture inflated

47 posterior angle wounded
My specimens from Eddy.
(July 20) Animal reticulated & admixed
to grass & leaves.



Specimina rufa, (Gouy)
High golden or straw-colored
cliffs of fine, white, sand
in very damp, marshy places
such as below Cabillo's
where I found it
April 11. Also one specimen
dark (fig. 8) in *Poa*
marginalis L.

(No good.)

Succinea grovesi(name very doubtful!)

Possibly bleached in clay
deposits with *Melicaea* occ-
-urring. *Potula cooperi*, *Potula*

- & several *Succineas*
also possibly bleached
S. obliqua, *Potula* differ-
from me more widely than
former, called on *Schubert*



but we get round no line
of common of this, because it
is not a dark one, like

1818, last species the 1 am i
very doubtful.

Gonatodes

Gonatodes leucogaster

Gonatodes leucogaster

Body slender & very long,
compressed. Head broad
widened & a little
flattened by compression.
The orbita larger than
P. diadema. Left posterior
only well rounded. It
usually not approach
our body when.

Life apparently not
partaking of cannibalism
peculiar to Florida
and especially Melania.



50
only a hundred
or so
1-24
Callianassa
C. intima

Shell 6 to 6.5 (8)

not increasing as
in last; but siphon irregular
& pointed, often exposed.
Ostium on siphon wavy (?) &
slanting. Lip anteriorly
rounded & sharply angulated
posteriorly. Columna flat
& slightly arched (?)
Umbilicus a mere click.
Lip appressed on columnella
from umbilicus back. Color is
an olive (?) green (Very common)
10 N.A. 1/4

Otopia (Molig?) — — ?

Found August 6th '80
about $\frac{1}{2}$ mile south
of Hartman in woods in
mound at foot of tree.

Skin not so fine as *Diplo-*
corticaria. Pelvic white.
One long curved barbs
bar tooth on chin. No
exceeding far in to the
cheek. Mouth 5; upper
rounded, " middle
decreasing, body width =
 $\frac{1}{6}$ total length
breadth equals about
 $\frac{1}{6}$ length also.

52 August 6th (continued)
saw plenty of Common Cuckoos
but very few Cuckoos.
where last spring they
were on every fence.

(Hinsdale) I attacked the
house very numer-
ous at Hartman's also
the structure on a col-
house the 2nd one north
of S. Liberty, which
knocked down, I took
Painted fragments of an
ocean which I secured
together with the abo-
-tive. (See below description)

Saw dozens of Melanerpes
sanguinolentus.

It must be a good place
for one, and perhaps
a *cooperi* *Accipiter cooperi*
(flying over Hartman's)

CORVUS

Saw skinned little
flycatcher (*Euripidoux?*)
crested, *plumbeus* (?),
yellowish suffusion (?).

Saw no positive markings.
Among shells were *U. s. l.* x
attenuata (?), large *Lima*
with light markings (?).
Pupa corticaria (?) a *Voluta*
in form like *K. gouldii*, but
unidentate, *Hyalinea* —
M. — + *Pupa* — ?

Flock live in bunches

bunch composed of a few twigs (very small), smartweed, (grasses), etc. of various kinds and sizes (fine). Very amount of old dead stalks young spiders.

This is from the seed house, the mud of bottle shaped structure is always black tan color and from elongated & pointed.

Young will now fly in about in great numbers. Placed paper and cover

55 Test is longer + slimmer.

Zonation on body as before.

② Hyalinea _____?

width 4. Apex has thin appearance & the surface rather shallow striae more apparent above than below, but to eye apparently wanting growth lines very apparent spine more elevated than in Macrocyathis.

@ natural size.



Dorsal view.



Ventral view of Aperture, found same place as Pupa (page 51)



Negroa.



Examination
teeth columnellar
tubercles alternated

All are tooth teeth at the columnella which is sinuous + irregular. About the middle it bears a strong projection toward the outer lip opposite a low tubercular tooth on latter. Embilica paradoxa. Lip well reflexed, but not in a transverse line. Cylindrical, oblique, & about $\frac{3}{4}$ times as long as wide. Surface rather sleek with a few small tubercles. Critically examined with naked eye the anterior species toothed

51 thus; first on posterior
(outer) angle a long
canine tooth extending
from a few teeth to
the back with a projection
on outside, next far
within a tubercular
tooth almost opposite
last, then a larger
one on the extreme an-
terior. Then another
farther in opposite the
2nd, and a few small
several ones between
last & 1st.

All teeth but 1st are on
outside. ^{grown} *Pupa armifera*

~~After (or nearly) finished~~

August 22.

Went to catch
pond in afternoon,
got lots of Physa
~~varia~~ & planorbis
planorbis varia

+ a beautiful
rotifer (S. Higgins)

August - 29

It began a
day, I got
out massive
parasitic
etc.

left - 5th

Spent well +
Handing, Del.
and wine

A day
afternoon
I went to
Exeter + got
Helix profusa
" monodonta
" hirsuta (about 4)
" attenuata (3)
Macrocyclis 1 live one
H. clausa

of these, the
2nd, 3rd, + 4th
were alive, also
a very large live

In morning I
found Thaddeus of
W.

Wages raised on
+ after Sept 4th
to £50 per week

Lecanora

— the lichen

(1)

lichen-like

greenish,

wormy

(2)

edge

fringed

wormy

(3)

yellowish —

yellowish

(4)

thin crust

wormy

?



thin lichen 10

edge fringed

wormy

yellowish

Palaeozoic animals - the
fishes - not as
abundant as last week
but on the surface less
numerous before the
wind - winds 8%
like indication of coming
change

Dr. — ? usual like
most except he was
of course below us
nearly as confident,
but had no
marked tendency to

above not so well
defined, striation more
regular + heavy,
fills the channel without
cutting pre-existing or
older relations, i.e.
what except at most should
be a last.

(6) Plan. 1



very flat, wheels of
spine not shoulder broad
15 mm.

Most easily identified
by the regular appearance
of base, which is not
more depressed than
in my largest P. bicarinatus.
Apex only moderately
depressed.

P. laevibis — ??

Same shell on a
larger plan.
Absolutely no tangible
difference.

Above (?) carinated sharply
perfectly symmetrical.

rather coarse striation

Same, but not coarse
+ less symmetrical

very unsymmetrical

1000

... were
their parents
order to save them
mimicous - fate, discharred
men bankridts, debauchees, and
the class, - people more apt to do
this damage the well

